RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/538,723Source: PCTDate Processed by STIC: 06-22-2005

ENTERED



PCT

```
PATENT APPLICATION: US/10/538,723
                                                              TIME: 10:24:33
                     Input Set : A:\P03185US0.txt
                     Output Set: N:\CRF4\06222005\J538723.raw
      3 <110> APPLICANT: Morgan, Richard George
      4
              Pettengell, Ruth
      5
              Forraz, Nicolas Pierre
              Mcguckin, Colin
      8 <120> TITLE OF INVENTION: Peptides Impairing PBX Dependent Gene Regulation
     10 <130> FILE REFERENCE: HO-P03185US0
C--> 12 <140> CURRENT APPLICATION NUMBER: US/10/538,723
     13 <141> CURRENT FILING DATE: 2005-06-13
     15 <150> PRIOR APPLICATION NUMBER: PCT/GB2003/005425
     16 <151> PRIOR FILING DATE: 2003-12-12
     18 <150> PRIOR APPLICATION NUMBER: GB0229151.6
     19 <151> PRIOR FILING DATE: 2002-12-13
     21 <160> NUMBER OF SEQ ID NOS: 119
     23 <170> SOFTWARE: PatentIn version 3.3
     25 <210> SEQ ID NO: 1
     26 <211> LENGTH: 11
     27 <212> TYPE: PRT
     28 <213> ORGANISM: Artificial Sequence
     30 <220> FEATURE:
     31 <223> OTHER INFORMATION: Peptide mimic of HOX Heptapeptide Region
     34 <220> FEATURE:
     35 <221> NAME/KEY: MISC FEATURE
     36 <222> LOCATION: (1)..(1)
     37 <223> OTHER INFORMATION: Xaa may be present or absent, is a moiety attached via the
              available amino group or alternatively via the side chain of the
     39
              adjacent amino acid residue, is preferably a peptide of 50 amino
     40
              acids or less which is optionall substituted.
     42 <220> FEATURE:
     43 <221> NAME/KEY: MISC_FEATURE
     44 <222> LOCATION: (2)..(2)
     45 <223> OTHER INFORMATION: Xaa may be present or absent, is one or more amino acids, and
is
              preferably W, T, PE, KQI, VV, PQT, H or RI.
     48 <220> FEATURE:
     49 <221> NAME/KEY: MISC FEATURE
     50 <222> LOCATION: (3)..(3)
     51 <223> OTHER INFORMATION: Xaa is an amino acids with an aromatic side chain, preferably
Υ,
     52
              F or W.
     54 <220> FEATURE:
```

RAW SEQUENCE LISTING

59 <220> FEATURE:

55 <221> NAME/KEY: MISC_FEATURE 56 <222> LOCATION: (4)..(4)

57 <223> OTHER INFORMATION: Xaa is the amino acid P or D.

60 <221> NAME/KEY: MISC_FEATURE

```
PATENT APPLICATION: US/10/538,723
                                                              TIME: 10:24:33
                     Input Set : A:\P03185US0.txt
                     Output Set: N:\CRF4\06222005\J538723.raw
     61 <222> LOCATION: (7)..(7)
     62 <223> OTHER INFORMATION: Xaa is an amino acid with a basic side chain, preferably K, R
or
     63
              Η.
     65 <220> FEATURE:
     66 <221> NAME/KEY: MISC FEATURE
     67 <222> LOCATION: (8)..(8)
     68 <223> OTHER INFORMATION: Xaa is an amino acid with a charged side chain, preferably a
              basic side chain, especially preferably K, R, E, H, D, N or Q.
     71 <220> FEATURE:
     72 <221> NAME/KEY: MISC FEATURE
     73 <222> LOCATION: (9)..(9)
     74 <223> OTHER INFORMATION: Xaa is an amino acid with a charged side chain, preferably a
              basic side chain, especially preferably K, R, E, H, D, N or Q.
     77 <220> FEATURE:
     78 <221> NAME/KEY: MISC_FEATURE
     79 <222> LOCATION: (10)..(10)
     80 <223> OTHER INFORMATION: Xaa is an amino acid with a basic side chain or serine,
     81
              especially preferably H, S, R, or K or a functionally equivalent
              derivative, variant or fragment thereof.
     84 <220> FEATURE:
     85 <221> NAME/KEY: MISC FEATURE
     86 <222> LOCATION: (11)..(11)
     87 <223> OTHER INFORMATION: Xaa may be present or absent, is a moiety attached via the
              available carboyxl group or alternatively via the side chain of
     88
              the adjacent amino acid residue, is preferably a peptide of 50
     89
     90
              amino acids or less which is optionall substituted.
     92 <400> SEQUENCE: 1
W--> 94 Xaa Xaa Xaa Xaa Trp Met Xaa Xaa Xaa Xaa
     95 1
     98 <210> SEO ID NO: 2
     99 <211> LENGTH: 9
     100 <212> TYPE: PRT
     101 <213> ORGANISM: Artificial Sequence
     103 <220> FEATURE:
     104 <223> OTHER INFORMATION: Peptide mimic of HOX heptapeptide region
     107 <220> FEATURE:
     108 <221> NAME/KEY: MISC FEATURE
     109 <222> LOCATION: (1)..(1)
     110 <223> OTHER INFORMATION: Xaa may be present or absent, is one or more amino acids,
and is
               preferably W, T, PE, KQI, VV, PQT, H or RI.
     113 <220> FEATURE:
     114 <221> NAME/KEY: MISC_FEATURE
     115 <222> LOCATION: (2)..(2)
     116 <223> OTHER INFORMATION: Xaa is an amino acid with an aromatic side chain, preferably
Y, F
     117
               or W.
     119 <220> FEATURE:
    120 <221> NAME/KEY: MISC FEATURE
     121 <222> LOCATION: (3)..(3)
     122 <223> OTHER INFORMATION: Xaa is the amino acid P or D
```

RAW SEQUENCE LISTING

```
PATENT APPLICATION: US/10/538,723
                                                             TIME: 10:24:33
                     Input Set : A:\P03185US0.txt
                     Output Set: N:\CRF4\06222005\J538723.raw
     124 <220> FEATURE:
     125 <221> NAME/KEY: MISC FEATURE
     126 <222> LOCATION: (6)..(6)
     127 <223> OTHER INFORMATION: Xaa is an amino acid with a basic side chain, preferably K,
R or
     128
               Н.
     130 <220> FEATURE:
     131 <221> NAME/KEY: MISC FEATURE
     132 <222> LOCATION: (7)..(7)
     133 <223> OTHER INFORMATION: Xaa is an amino acid with a charged side chain, preferably a
     134
               basic side chain, especially preferably K, R, E, H, D, N, or Q.
     136 <220> FEATURE:
     137 <221> NAME/KEY: MISC FEATURE
     138 <222> LOCATION: (8)..(8)
     139 <223> OTHER INFORMATION: Xaa is an amino acid with a charged side chain, preferably a
               basic side chain, especially preferably K, R, E, H, D, N, or Q.
     142 <220> FEATURE:
     143 <221> NAME/KEY: MISC_FEATURE
     144 <222> LOCATION: (9)..(9)
     145 <223> OTHER INFORMATION: Xaa is an amino acid with a basic side chain or serine,
               especially preferably H, S, R or K.
     148 <400> SEQUENCE: 2
W--> 150 Xaa Xaa Xaa Trp Met Xaa Xaa Xaa Xaa
     151 1
     154 <210> SEQ ID NO: 3
     155 <211> LENGTH: 11
     156 <212> TYPE: PRT
     157 <213> ORGANISM: Artificial Sequence
     159 <220> FEATURE:
     160 <223> OTHER INFORMATION: Peptide mimic of HOX heptapeptide region.
     163 <220> FEATURE:
     164 <221> NAME/KEY: MISC FEATURE
     165 <222> LOCATION: (1)..(1)
     166 <223> OTHER INFORMATION: Xaa may be present or absent, is a moiety attached via the
               available amino group or alternatively via the side chain of the
     167
     168
               adjacent amino acid residue, is preferably a peptide of 50 amino
               acids or less which is optionally substitute
     169
     171 <220> FEATURE:
     172 <221> NAME/KEY: MISC FEATURE
    173 <222> LOCATION: (2)..(2)
    174 <223> OTHER INFORMATION: Xaa may be present or absent, is one or more amino acids,
and is
               preferably W, T, PE, KQI, VV, PQT, H or RI.
    175
    177 <220> FEATURE:
    178 <221> NAME/KEY: MISC FEATURE
     179 <222> LOCATION: (3)..(3)
    180 <223> OTHER INFORMATION: Xaa is the amino acid Y or F.
    182 <220> FEATURE:
    183 <221> NAME/KEY: MISC FEATURE
    184 <222> LOCATION: (4)..(4)
    185 <223> OTHER INFORMATION: Xaa is the amino acid P or D.
```

RAW SEQUENCE LISTING

TIME: 10:24:33

```
Input Set : A:\P03185US0.txt
                     Output Set: N:\CRF4\06222005\J538723.raw
     187 <220> FEATURE:
     188 <221> NAME/KEY: MISC FEATURE
     189 <222> LOCATION: (7)..(7)
     190 <223> OTHER INFORMATION: Xaa is the amino acid K or R
     192 <220> FEATURE:
     193 <221> NAME/KEY: MISC FEATURE
     194 <222> LOCATION: (8)..(8)
     195 <223> OTHER INFORMATION: Xaa is the amino acid K, R or E.
     197 <220> FEATURE:
     198 <221> NAME/KEY: MISC_FEATURE
     199 <222> LOCATION: (9)..(9)
    200 <223> OTHER INFORMATION: Xaa is the amino acid H, R, O or K.
    202 <220> FEATURE:
    203 <221> NAME/KEY: MISC FEATURE
    204 <222> LOCATION: (10)..(10)
    205 <223> OTHER INFORMATION: Xaa is the amino acid H, S, R or K.
     207 <220> FEATURE:
     208 <221> NAME/KEY: MISC_FEATURE
    209 <222> LOCATION: (11)..(11)
    210 <223> OTHER INFORMATION: Xaa may be present or absent, is a moiety attached via the
    211
               available carboyxl group or alternatively via the side chain of
    212
               the adjacent amino acid residue, is preferably a peptide of 50
    213
               amino acids or less which is optionally substit
    215 <400> SEQUENCE: 3
W--> 217 Xaa Xaa Xaa Xaa Trp Met Xaa Xaa Xaa Xaa
    218 1
                                             10
    221 <210> SEQ ID NO: 4
    222 <211> LENGTH: 11
    223 <212> TYPE: PRT
    224 <213> ORGANISM: Artificial Sequence
    226 <220> FEATURE:
    227 <223> OTHER INFORMATION: Peptide mimic of HOX heptapeptide region
    230 <220> FEATURE:
    231 <221> NAME/KEY: MISC FEATURE
    232 <222> LOCATION: (1)..(1)
    233 <223> OTHER INFORMATION: Xaa may be present or absent, is a moiety attached via the
               available amino group or alternatively via the side chain of the
    235
              adjacent amino acid residue, is preferably a peptide of 50 amino
               acids or less which is optionally substitute
    236
    238 <220> FEATURE:
    239 <221> NAME/KEY: MISC_FEATURE
    240 <222> LOCATION: (2)..(2)
    241 <223> OTHER INFORMATION: Xaa may be present or absent, is one or more amino acids,
and is
    242
              preferably W, T, PE, KQI, VV, PQT, H or RI.
    244 <220> FEATURE:
    245 <221> NAME/KEY: MISC FEATURE
    246 <222> LOCATION: (7)..(7)
    247 <223> OTHER INFORMATION: Xaa is the amino acid K or R.
    249 <220> FEATURE:
```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/538,723

TIME: 10:24:33

```
Input Set : A:\P03185USO.txt
                     Output Set: N:\CRF4\06222005\J538723.raw
     250 <221> NAME/KEY: MISC FEATURE
     251 <222> LOCATION: (8)..(8)
     252 <223> OTHER INFORMATION: Xaa is the amino acid K, R or E.
     254 <220> FEATURE:
     255 <221> NAME/KEY: MISC FEATURE
     256 <222> LOCATION: (9)..(9)
     257 <223> OTHER INFORMATION: Xaa is the amino acid H, R, Q or K.
     259 <220> FEATURE:
     260 <221> NAME/KEY: MISC_FEATURE
     261 <222> LOCATION: (10)..(10)
     262 <223> OTHER INFORMATION: Xaa is the amino acid H, S, R or K.
     264 <220> FEATURE:
     265 <221> NAME/KEY: MISC FEATURE
     266 <222> LOCATION: (11) ... (11)
     267 <223> OTHER INFORMATION: Xaa may be present or absent, is a moiety attached via the
               available carboyxl group or alternatively via the side chain of
     268
     269
               the adjacent amino acid residue, is preferably a peptide of 50
     270
               amino acids or less which is optionally substituted.
     272 <400> SEQUENCE: 4
W--> 274 Xaa Xaa Tyr Pro Trp Met Xaa Xaa Xaa Xaa
     278 <210> SEQ ID NO: 5
     279 <211> LENGTH: 11
     280 <212> TYPE: PRT
     281 <213> ORGANISM: Artificial Sequence
     283 <220> FEATURE:
     284 <223> OTHER INFORMATION: Peptide mimic of HOX heptapeptide region
     287 <220> FEATURE:
     288 <221> NAME/KEY: MISC FEATURE
     289 <222> LOCATION: (1)..(1)
     290 <223> OTHER INFORMATION: Xaa may be present or absent, is a moiety attached via the
     291
               available amino group or alternatively via the side chain of the
     292
               adjacent amino acid residue, is preferably a peptide of 50 amino
     293
               acids or less which is optionally substitute
     295 <220> FEATURE:
     296 <221> NAME/KEY: MISC FEATURE
     297 <222> LOCATION: (11) ... (11)
     298 <223> OTHER INFORMATION: Xaa may be present or absent, is a moiety attached via the
               available carboyxl group or alternatively via the side chain of
     299
     300
               the adjacent amino acid residue, is preferably a peptide of 50
               amino acids or less which is optionally substit
     303 <400> SEQUENCE: 5
W--> 305 Xaa Trp Tyr Pro Trp Met Lys Lys His His Xaa
     309 <210> SEQ ID NO: 6
     310 <211> LENGTH: 9
     311 <212> TYPE: PRT
     312 <213> ORGANISM: Artificial Sequence
     314 <220> FEATURE:
```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/538,723

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 06/22/2005 PATENT APPLICATION: US/10/538,723 TIME: 10:24:34

Input Set : A:\P03185USO.txt

Output Set: N:\CRF4\06222005\J538723.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; Xaa Pos. 1,2,3,4,7,8,9,10,11 Seq#:2; Xaa Pos. 1,2,3,4,7,8,9, Seq#:3; Xaa Pos. 1,2,3,4,7,8,9,10,11 Seq#:4; Xaa Pos. 1,2,7,8,9,10,11 Seq#:5; Xaa Pos. 1,11 Seq#:8; Xaa Pos. 1

Seq#:9; Xaa Pos. 1,3,4,5,10,11,13,15,16

VERIFICATION SUMMARY

DATE: 06/22/2005 PATENT APPLICATION: US/10/538,723 TIME: 10:24:34

Input Set : A:\P03185US0.txt

Output Set: N:\CRF4\06222005\J538723.raw

L:12 M:270 C: Current Application Number differs, Replaced Current Application Number

L:94 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:0 L:150 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0 L:217 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0 L:274 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0 L:305 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0 L:354 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:0 L:414 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:0